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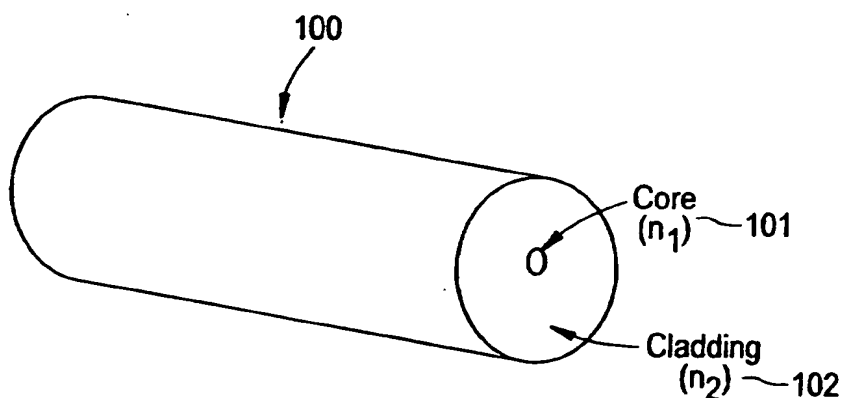
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(54) Title: HIGHER WAVELENGTH OPTIMIZED OPTICAL FIBER WAVEGUIDE



(57) Abstract: Single mode optical fiber waveguides are disclosed that offer a broader band for transmission over the wavelength range of about 1300 nm to about 1700 nm with reduced bending loss. The extended ranges of these fibers are achieved by altering the optical characteristics of the fiber, namely, the MAC number, the mode field diameter ("MFD"), and the cut-off wavelength. The single mode fibers disclosed exhibit a lower MFD and higher cut-off wavelength as a result of altering the MAC number of the optical fiber waveguide. In addition, optical fiber transmission systems, wave division multiplexing ("WDM") systems, and optical fiber ribbon cables are disclosed that incorporate the single mode optical fiber of the present invention.



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